

MONTHLY WEATHER REVIEW.

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BOARD OF EDITORS { Mr. Horace E. Smith, Chief Clerk of Weather Bureau,
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Mr. Edward B. Garriott, in charge of Review Room.

INTRODUCTION.

This REVIEW is based on reports for April, 1892, from 2,911 regular and voluntary observers. These reports are classified as follows: 158 reports from Weather Bureau stations; 47 reports from United States Army post surgeons; 1,902 monthly reports from state weather service and voluntary observers; 31 reports from Canadian stations; 219 reports through the Cen-

tral Pacific Railway Company; 554 marine reports through the co-operation of the Hydrographic Office, Navy Department; marine reports through the "New York Herald Weather Service;" monthly reports from local weather services established in all states and territories, except Idaho; and international simultaneous observations. Trustworthy newspaper extracts and special reports have also been used.

CHARACTERISTICS OF THE WEATHER FOR APRIL, 1892.

Cool and wet weather delayed farming operations in the Pacific coast states, the Dakotas, Nebraska, parts of Kansas and Indian Territory, and in Minnesota, Iowa, Missouri, and Louisiana. In Florida, southern and western Texas, parts of New Mexico and Oklahoma Territory, and from eastern New York over central and northern New England the month was unusually warm and dry. In Florida small fruits and oranges were injured by drought. Crops were seriously affected by drought in Texas. Owing to a scarcity of water and grass a great loss of live stock occurred on the ranges of southern and western Texas and New Mexico.

TEMPERATURE.

The temperature was lower than usual, except in Florida, Texas, the eastern lake region, and New England. The most marked departure below the normal was noted from the middle and north Pacific coasts to the Dakotas, where it was 4° to 6°. On the 10th and 11th frost injured fruit and tender vegetation from Tennessee to the Carolina coast, and on the 16th frost was destructive to vegetation in the Carolinas and Georgia.

PRECIPITATION.

The monthly precipitation was in excess of the average amount for April in the central valleys and along the north Pacific coast, and was deficient in New England and southeastern and southwestern districts. In the first decade of the month heavy snow fell from Colorado and Wyoming to Iowa, the snowfall being notably heavy in the Black Hills region of South Dakota and Wyoming, where a great loss of live stock was reported.

STORMS.

Destructive local storms were noted on five to seven dates from Texas to Kansas and Illinois. Unusually severe wind and local storms occurred on the 1st from the middle and southeast slopes of the Rocky Mountains to the western lake

region; a tornado was reported in Harvey county, Kans.; and six persons were killed in Chicago, Ill. Tornadoes occurred in Oklahoma, Kansas, and Missouri on the 3d; in Arkansas and Illinois on the 4th; in New York on the 5th; and in Arkansas and Louisiana on the 20th.

FLOODS.

In the early part of the month streams in the lower Ohio valley, Tennessee, Mississippi, Alabama, and New York rose rapidly. Floods in the Tennessee River and tributaries caused great damage in Tennessee and northern Alabama. The Yal-labusha River was reported the highest ever known at Grenada, Miss. High water caused great damage in northern Mississippi. Large areas were submerged in Alabama by the overflow of the Coosa River. In east-central Mississippi great destruction to life and property resulted from the overflow of the Tombigbee River and tributaries. The Red River of the North overflowed its banks at Saint Vincent, Minn., on the 10th. On the 6th the Mississippi River reached the danger-line at Cairo, Ill. On the 14th the danger-line was reached at Memphis, Tenn., and Vicksburg, Miss. At New Orleans, La., the danger-line was reached on the 5th. At the close of the month the Mississippi River was above the danger-line from Cairo to the Gulf. The river was falling slowly at Cairo, and rising south of Memphis. No important breaks had occurred in the levees.

AUROSAS.

The more notable auroral displays of the month were noted from New England to Michigan on the 23d; from Maine to Washington, and in the Ohio valley, on the 25th; from Maine to Montana, and from the Ohio valley to the middle slope of the Rocky Mountains, on the 26th; and at scattered points from Maine to Washington on the 30th.

ATMOSPHERIC PRESSURE (expressed in inches and hundredths).

The distribution of mean atmospheric pressure for April, 1892, as determined from observations taken daily at 8 a. m. and 8 p. m. (75th meridian time), is shown on Chart II by isobars.

In April the mean pressure is usually highest on the Pacific coast between the 37th and 46th parallels, where it is above 30.05, and it is above 30.00 from Manitoba to the Lake Superior region and over districts east of the Mississippi and south of the